

1. The Window Object

- The window object represents an open window in a browser.
- The window object is supported by all browsers. It represents the browser's window.
- All global JavaScript objects, functions, and variables automatically become members of the window object.
- Global variables are properties of the window object.
- Global functions are methods of the window object.
- Even the document object (of the HTML DOM) is a property of the window object:

```
window.document.getElementById("header");
```

is the same as:

```
document.getElementById("header");
```

- The browser window (the browser viewport) is NOT including toolbars and scrollbars.

1. Few Window Object Properties :

- `closed` - Returns a boolean true if a window is closed.
- `console` - Returns the Console Object for the window.
- `document` - Returns the Document object for the window.
- `frameElement` - Returns the frame in which the window runs.
- `frames` - Returns all window objects running in the window.
- `history` - Returns the History object for the window.
- `innerHeight` - Returns the height of the window's content area (viewport).
including scrollbars
- `innerWidth` - Returns the width of a window's content area (viewport) including
scrollbars
- `length` - Returns the number of <iframe> elements in the current window
- `localStorage` - Allows to save key/value pairs in a web browser. Stores the data
with no expiration date
- `location` - Returns the Location object for the window.

1. Few Window Object Methods

- `addEventListener()` - Attaches an event handler to the window
- `alert()` - Displays an alert box with a message and an OK button
- `atob()` - Decodes a base-64 encoded string
- `blur()` - Removes focus from the current window
- `btoa()` - Encodes a string in base-64
- `clearInterval()` - Clears a timer set with `setInterval()`
- `clearTimeout()` - Clears a timer set with `setTimeout()`
- `close()` - Closes the current window

- `confirm()` - Displays a dialog box with a message and an OK and a Cancel button
- `focus()` - Sets focus to the current window
- `getSelection()` - Returns a Selection object representing the range of text selected by the user
- `moveBy()` - Moves a window relative to its current position
- `moveTo()` - Moves a window to the specified position
- `open()` - Opens a new browser window

1. The Document Object

- When an HTML document is loaded into a web browser, it becomes a document object.
- The document object is the root node of the HTML document.
- The document object is a property of the window object.
- The document object is accessed with:

`window.document` or just `document`

1. Document Object Properties and Methods

- `activeElement` - Returns the currently focused element in the document
- `addEventListener()` - Attaches an event handler to the document
- `adoptNode()` - Adopts a node from another document
- `baseURI` - Returns the absolute base URI of a document
- `body` - Sets or returns the document's body (the `<body>` element)
- `characterSet` - Returns the character encoding for the document
- `close()` - Closes the output stream previously opened with `document.open()`
- `cookie` - Returns all name/value pairs of cookies in the document
- `createAttribute()` - Creates an attribute node
- `createComment()` - Creates a Comment node with the specified text
- `createElement()` - Creates an Element node
- `createEvent()` - Creates a new event
- `createTextNode()` - Creates a Text node
- `defaultView` - Returns the window object associated with a document, or null if none is available.
- `designMode` - Controls whether the entire document should be editable or not.
- `doctype` - Returns the Document Type Declaration associated with the document
- `documentElement` - Returns the Document Element of the document (the `<html>` element)
- `documentURI` - Sets or returns the location of the document
- `domain` - Returns the domain name of the server that loaded the document

- `getElementById()` - Returns the element that has the ID attribute with the specified value
- `getElementsByClassName()`- Returns an HTMLCollection containing all elements with the specified class name
- `getElementsByName()` - Returns an live NodeList containing all elements with the specified name
- `getElementsByTagName()` - Returns an HTMLCollection containing all elements with the specified tag name

1. Difference between Document and Window Object

Document	Window
It represents any HTML document or web page that is loaded in the browser.	It represents a browser window or frame that displays the contents of the webpage.
It is loaded inside the window.	It is the very first object that is loaded in the browser.
It is the object of window property.	It is the object of the browser.
All the tags, elements with attributes in HTML are part of the document.	Global objects, functions, and variables of JavaScript are members of the window object.
We can access the document from a window using the <code>window.document</code>	We can access the window from the window only. i.e. <code>window.window</code>
The document is part of BOM (browser object model) and dom (Document object model)	The window is part of BOM, not DOM.
Properties of document objects such as title, body, cookies, etc can also be accessed by a window like this <code>window.document.title</code>	Properties of the window object cannot be accessed by the document object.
syntax: <code>document.propertyname;</code>	syntax: <code>window.propertyname;</code>

Document	Window
<p>example:</p> <p>document.title : will return the title of the document</p>	<p>example:</p> <p>window.innerHeight : will return the height of the content area of the browser</p>